

Date: Sat, 21 May 94 04:30:16 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: Bulk
Subject: Ham-Digital Digest V94 #156
To: Ham-Digital

Ham-Digital Digest Sat, 21 May 94 Volume 94 : Issue 156

Today's Topics:

 9600 bps radio modems
 AEA CP-1
 Anybody use Mathcad?
 Baycom circuit? (2 msgs)
 CISCO Router to Gracilis PackeTen
 Don't miss May issue of QEX
ftp site to get "graphic packet" (w/ 7plus) with English doc's?
 HTX-404
 Kenwood tr7400a
Multi-mode TNC suggestions (2 msgs)
 PK-232MBX vs. MFJ-1278B
 what freq to receive weather fax ?

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 20 May 94 15:18:31 GMT
From: ncrw2.ncr.com!ncrhub2!ranger!cn2935.DaytonOH.NCR.COM!jra@uunet.uu.net
Subject: 9600 bps radio modems
To: ham-digital@ucsd.edu

In article <2rdtrb\$jvc@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor)
writes:

>I'm disgusted with the performance of the carrier detect circuits in
>the three popular 9600 bps radio modems used by amateurs - the K9NG,
>G3RUH, and new TAPR modems.

[good discussion deleted]

>I'd really like to come up with some sort of better DCD - and it
>wouldn't hurt if it had better data recovery performance as well.

>Sure, the right answer is DSP. N4HY will tell you that, and I agree.
>But short of that, is there some approach that'll help?

>(Being compatable with the scrambled direct FSK that the current modems
>use would be a plus, but isn't required.)

What's wrong with using a squelch-derived DCD? It's possible to make a
squelch that's fast and reliable -- in the Kantronics D4-10, the squelch
response time is <well> under 10 milliseconds, and it is very solid.

Is it really true that normal VHF radio squelches today are horribly slow?
Has anyone measured the squelch speed of popular radios being used for 9600?
It may be that even the slower ones could be made acceptably fast by clipping
out a capacitor or two...

I've always questioned the idea that you want a digital DCD so that
other signals on the channel won't hold off transmission. First, if you
transmit over the top of someone because your DCD doesn't happen to respond to
their modulation scheme, there's a question of deliberate interference. But
more practically, if the signal is strong enough to override a reasonable
squelch setting, the chances are it's going to stomp on your packets, anyway.

John AG9V
jra@lawdept.daytonOH.ncr.com

Date: Fri, 20 May 1994 15:10:02 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!vixen.cso.uiuc.edu!sdd.hp.com!
hp-pcd!news1.boi.hp.com!cupnews0.cup.hp.com!tomg@network.ucsd.edu
Subject: AEA CP-1
To: ham-digital@ucsd.edu

I have acquired an ancient(?) AEA CP-1 Computer Patch for RTTY and CW. It
came with a cartridge for RTTY/CW and another for AMTOR, both for the
Commodore C-64 computer. If anyone has instructions for using the AMTOR
cartridge (I have instructions for RTTY/CW) for the C-64, and any information
about software to use this thing on an IBMPC clone please email me or post
to this newsgroup.

Thanks, Tom Graham - N6WLF
tomg@cup.hp.com

Date: 20 May 94 19:06:18 GMT
From: agate!howland.reston.ans.net!cs.utexas.edu!convex!news.duke.edu!concert!
hearst.acc.Virginia.EDU!cscsun!dtiller@ucbvax.berkeley.edu
Subject: Anybody use Mathcad?
To: ham-digital@ucsd.edu

Henry B. Smith (hbs@crl.com) wrote:
: Does anybody use the Mathcad math package? I know that Mathsoft
: occasionally has discount offers but I am not on their mailing list
: so I dont have a coupon (or whatever they offer).

Yes. I use mathcad 5.0+. It's very powerful. Email me if you'd like
more info.

--
David Tiller | Network Administrator | Voice: (804) 752-3710 |
dtiller@rmc.edu | n2kau/4 | Randolph-Macon College | Fax: (804) 752-7231 |
Brady Law critique removed | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
due to liberal PC pressure. | Ashland, Va 23005 | 77d 31' 32.19" W |

Date: 20 May 94 18:37:04 GMT
From: agate!howland.reston.ans.net!torn!nott!emr1!gdim.geod.emr.ca!
stephens@ucbvax.berkeley.edu
Subject: Baycom circuit?
To: ham-digital@ucsd.edu

Darryl Linkow (darryl.linkow@ledge.com) wrote:
: I have downloaded the Baycom software and read the manual. From
: what I can understand, this software let's me use do packet without
: a TNC. What I don't understand is how I connect my HT to my
: computer. The manual shows some inputs to a serial port, but don't
: I need a modem as well? Also, there is something about a small
: circuit board to interface the radio to the RS-232 port. Anyone
: have any info on this? Also, is anyone using Baycom? If so, are
: you happy with it? Or should I spend a bunch of money and buy a
: TNC? I am new to ham radio (I am still waiting for my license, 7
: weeks now!) and don't know if I will like packet, so I am looking
: to get my feet wet at a low cost, to see if I like it. Any info
: would be appreciated.

: ---
: ~ OLX 2.2 ~ Darryl Linkow (818)346-5278 9 am - 5 pm PDT

The circuit is available as a postscript file as TCM3105.zip
that is in the oak.oakland.edu msdos/packet directory.
A local radio club (Ottawa) is offering a kit for \$49 Can.
VE3PYG/VE3GSC

--

Dave Stephenson
Geological Survey of Canada *Too much bad arithmetic is not a *
Ottawa, Ontario, Canada *substitute for not enough good *
Internet: stephens@geod.emr.ca * mathematics *

Date: Fri, 20 May 1994 15:36:25 GMT
From: elroy.jpl.nasa.gov!usc!howland.reston.ans.net!europa.eng.gtefsd.com!
news.umbc.edu!eff!news.kei.com!ub!freenet.buffalo.edu!aa450@ames.arpa
Subject: Baycom circuit?
To: ham-digital@ucsd.edu

In a previous article, darryl.linkow@ledge.com (Darryl Linkow) says:

>I have downloaded the Baycom software and read the manual. From
>what I can understand, this software let's me use do packet without
>a TNC. What I don't understand is how I connect my HT to my
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>I need a modem as well? Also, there is something about a small
>circuit board to interface the radio to the RS-232 port. Anyone
>have any info on this? Also, is anyone using Baycom? If so, are
>you happy with it? Or should I spend a bunch of money and buy a
>TNC? I am new to ham radio (I am still waiting for my license, 7
>weeks now!) and don't know if I will like packet, so I am looking
>to get my feet wet at a low cost, to see if I like it. Any info
>would be appreciated.

>

> ≥ OLX 2.2 ≥ Darryl Linkow (818)346-5278 9 am - 5 pm PDT

>

Darryl, as you have already said, it takes a modem to make Baycom
work. It is a fairly simple device which is often packaged inside
the housing of a 25-pin RS-232 connector.

Check QST 6/94 issue, p140 for Tigertronics add of BayPac BP-1.
(800)822-9722.

Also, PacComm has a BayMod-9 and BayMod-25 (9 or 25 pin RS-232)
(800)486-7388.

There are many of these in use and they are thought to be a good
way to get started. Many users go no further. Cost is about \$50.

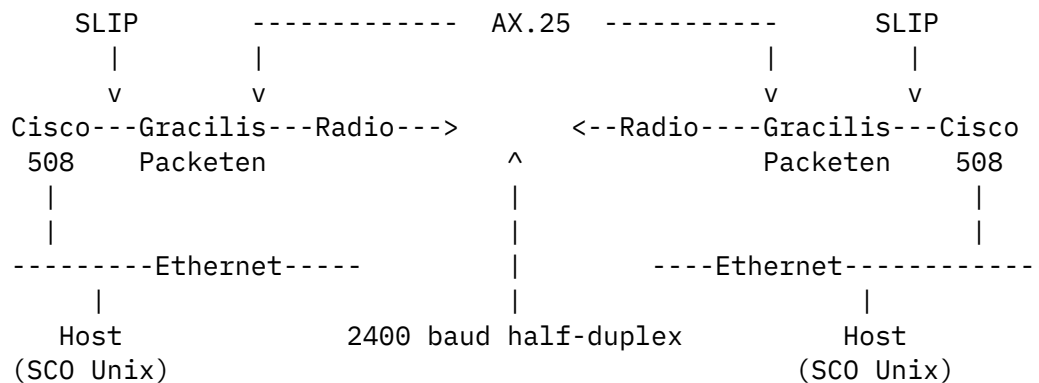
73's Kurt, N2TTE

--

Date: 19 May 1994 16:43:19 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!
sol.ctr.columbia.edu!news.kei.com!eff!blanket.mitre.org!linus.mitre.org!
jdurand@network.ucsd.edu
Subject: CISCO Router to Gracilis PackeTen
To: ham-digital@ucsd.edu

We have been expirimenting with linking LAN's together using CISCO's and Gracilis PackeTen's over low-speed (2400 baud) half-duplex radio networks. We are using the Gracilis to interface to a number of military radios. We are trying to show how hosts on the battlefield in mobile platforms (ie vehicles) can be internetworked using commercial technology with existing military communications systems.

Our network looks like this:



I'm looking for others who have experience linking CISCO's to the Gracilis, to share ideas/problems/solutions.

Thanks in advance.

John

John S. Durand The MITRE Corporation
Group Leader 145 Wyckoff Road
Tactical Networking Suite 201
Networking Technical Center Eatontown, NJ 07724

908-389-6799 Internet: jdurand@mitre.org

908-544-8317 (fax)

Date: Fri, 20 May 1994 21:39:34 GMT
From: lll-winken.llnl.gov!sol.ctr.columbia.edu!howland.reston.ans.net!
vixen.cso.uiuc.edu!uchinews!kimbark!khopper@seismo.css.gov
Subject: Don't miss May issue of QEX
To: ham-digital@ucsd.edu

F.Y.I.

Don't miss the May issue of QEX - there are two excellent
articles. (1) A high performance HF modem by KC7WW and
(2) a THOROUGH explanation of G-TOR by the authors from
Kantronics.

Ken - N9VV

Date: Thu, 19 May 1994 17:55:03 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!s1.gov!fastrac.llnl.gov!lll-winken.llnl.gov!
elroy.jpl.nasa.gov!usc!howland.reston.ans.net!europa.eng.gtefsd.com!
library.ucla.edu!csulb.@@ihnp4.ucsd.edu
Subject: ftp site to get "graphic packet" (w/ 7plus) with English doc's?
To: ham-digital@ucsd.edu

Downloaded a packet program "graphic packet" that is also suppose to
automatically identify and decode binaries encoded in "7plus".
Problem is that the doc's are in German, and very little in English.
So, I'm not sure if I can even run it on a 286 with DOS 5.0 and
an mono EGA and no windows.

Anyplace have doc.s in English? Or if it won't run on my PC, I'd
like to know that.

(Yes, I'm one of those Americans that know only one language (English),
but please realize that there are too many choices of 2nd language
and none an obvious choice, and I don't have time or ability to do
them all). :-)

Date: Fri, 20 May 1994 14:35:09 GMT
From: ihnp4.ucsd.edu!news.acns.nwu.edu!math.ohio-state.edu!howland.reston.ans.net!
europa.eng.gtefsd.com!gatech!swrinde!emory!rsiatl!ke4zv!gary@network.ucsd.edu

Subject: HTX-404
To: ham-digital@ucsd.edu

In article <9405182311.AA09268@sgi28.csci.csusb.edu> mwestfal@sgi28.CSci.CSusb.EDU (Michael Westfall) writes:

>I just bought a HTX-404 from er, ah.. Radio Shack, and knowing that they are
>made by ICOM and noticing that the battery pack looks the same,
>I asked the GBTC (Guy Behind the Counter) about whether I could use
>my ICOM battery packs on it. He said no, that if you use a higher voltage
>battery pack (for instance a 12 volt one) it "would burn out a little diode
>inside the radio"..

>

> Anybody know whether this is true? If so, it seems like a colossal
>design blunder, especially seeing as how there is no warning in the
>user's manual telling you not to do this!

Official word from a Radio Shack VP is that the radios are *not* made
by Icom. They are manufactured to RS's design by an unspecified Korean
company. However, Icom battery packs of the IC2 generation will fit and
work.

My opinion now. I wouldn't use a 12 volt pack unless I was sure it
was safe. I know the standard Icom packs work fine. I *think* it's OK
to use a 12 volt pack unless you try to run the radio off external
power or charge the battery *through the radio*. I *think* you can use
the 12 volt pack if you always charge it while *off the radio* in an
Icom drop in charger, but I haven't actually done that.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: 21 May 94 00:59:42 GMT
From: news-mail-gateway@ucsd.edu
Subject: Kenwood tr7400a
To: ham-digital@ucsd.edu

Has anyone here hooked up a Kenwood TR-7400A to a PK-88? I checked in the
manual for the PK-88 and it looks like I can use the mike connector as the
standard 4 - pin connection given. It seems a bit generic to me and I'd like
to confirm it before I buy a connector and create smoke. I also noticed and
external speaker jack and a tone pad connector. Could these be used?

73 DE KB7UUX

--

Stuart Whiting stuartwh@microsoft.com

"All the science I don't understand, It's just my job five days a week"

Date: 19 May 1994 03:41:46 GMT
From: lll-winken.llnl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
spool.mu.edu!hri.com!noc.near.net!chaos.dac.neu.edu!chaos.dac!wy1z@ames.arpa
Subject: Multi-mode TNC suggestions
To: ham-digital@ucsd.edu

Since this request falls under both digital communications and equipment,
I'm crossposting -

I'm budgeting for a multi-mode, and am eyeing either the AEA PK232MBX or
the AEA PK900. What are the comments pro/con with each?

How about comparing/contrasting them with the Kantronics KAM Plus.

I'm looking for people's experiences with performance AND reliability for
the price. For now, I plan on doing a lot of receiving.

Additionally, can any of the above units receive the 137Mhz NOAA weather
satellites? If so, what is/are the requirement(s)?

Thanks for any info you can provide.

I will summarize if I get enough responses.

Scott

--

```
=====
| Scott Ehrlich           Amateur Radio: wy1z           AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu   BITnet: wy1z@NUHUB           AX.25: wy1z@wa1phy.ma.usa.na |
|-----|
|           Maintainer of the Boston Amateur Radio Club hamradio FTP area on           |
|           oak.oakland.edu - /pub/hamradio           |
|=====
```

Date: 20 May 94 07:03:07 GMT
From: dog.ee.lbl.gov!agate!cat.cis.Brown.EDU!noc.near.net!news.delphi.com!
rabbi@ucbvax.berkeley.edu
Subject: Multi-mode TNC suggestions

To: ham-digital@ucsd.edu

Out here, the AEA's are losing ground to the KAM+. You may want to give it a closer look, now that G-TOR is here. Haven't used it myself, but I've heard many good things about it's efficiency. Check out PKGold for the AEA and KaGold for the KAM. This is host-mode software that is definately worth considering.

Karl

Date: Tue, 17 May 1994 21:10:36 GMT
From: taligent!tom-taylor.taligent.com!user@ames.arpa
Subject: PK-232MBX vs. MFJ-1278B
To: ham-digital@ucsd.edu

In article <2r34vk\$3lc@mary.iaa.org>, denglet1@iaa.org (Tom Dengler) wrote:

>
> ST>narrowed it down to the MFJ-1278B and the AEA PK-232MBX. I'd love to
>
> I have the MFJ1278B. This is the only TNC I have had, so I can't really
> compare.
>
> ST> "random code generator" (?)
> This random generator allows for practicing CW. I have never used it.
>
> ST>Is the MFJ fax really full-color, or is it "color shading" instead of gray?
> I think it depends on the transmission mode????
>

The 1278 supports SSTV and FAX, but unlike the other text-only modes where the 1278 does all the work, SSTV and FAX require smart software on the computer side to transform a binary stream of nibbles into a picture. MFJ's IBM compatible MultiCom program supports color FAX by sending (and receiving) three different pictures or color separations. On the receiving end, the three pictures are combined into one picture again. Really, this is not much different than the way many of the color SSTV formats work.

Although the 1278 supports SSTV reception, all of the decoding logic is in the software external to the 1278. MFJ can send you technical information on

how
the 1278 sends the binary stream of data (the information is actually in
the
technical manual that comes with the 1278), but you'll have to figure out
how
each of the SSTV formats (Scottie1, Robot72c, etc.) is interpreted.

Tom Taylor

Date: 19 May 1994 21:46:42 GMT
From: newsgate.watson.ibm.com!watnews.watson.ibm.com!watson.ibm.com!
uri@uunet.uu.net
Subject: what freq to receive weather fax ?
To: ham-digital@ucsd.edu

In article <2r6b56\$8ii@usenet.INS.CWRU.Edu>, ep480@cleveland.Freenet.Edu (Wayne
Stade) writes:

> WeFax frequencies to try are as follows:
> 8682, 12730, 17151.2, 22528.9kHz. Hope this helps...

A question: when I receive WeFax - it's practically unreadable.
I.e. one can make out a few words and digits, but that's all...
Is it supposed to be that way, or should I tune up something?
[No, the LPM and IOC is correct. I'm using PK-232...]

Thanks!
Regards,
Uri.

<Disclaimer>

End of Ham-Digital Digest V94 #156
